Work	Order	$ID_{2}$	108104
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D 2935 B 108104

\*108104\*

Page 1

October-07-13 9	0:11:35 AM											
Revision ID:	D2935 Saddle Spacer	·		Accept	*	<b>1</b> 900	<b>040</b>	100	<b>)</b> *	Setup Sta	i VI	S1* S2*
Start Date: Required Date: Reference:	10/07/13 10/07/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*			Cust Item I Customer:	D:					
Approvals:	Process Pla	in: MC5	Date: 13 - 10-0	7 Tooling:		Da	ate:		I	Run Sta	17	R1*
rippi ovais.			•			Da				Sto	*N	R2*
Sequence ID/ Work Center II	)	Operation Description		Set Up/ Run Hours		Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	ision Nbr										
D2935	Rev	В										
100				0.00								-a-
*100*		FLOW WATER JET		0.00					20	_0		JMB-12-
Waterjet FLOW CNC Waterje	et	Memo	Dwg <b>D2</b> 935	0.00								
6061-08		Dwg Rev: Prog Rev: 2-Deburr if	B									
110		QC2- Inspect parts off m	nachine FAI/FAIB	0.00				•	,			,
*110*									20	ర		Jm312-
QC Quality Control		Memo		0.00								
120		QC8- Inspect parts - sec	ond check		DAS 27				$\mathcal{Y}_{\lambda}$			
*120* QC Quality Control		Memo		0.00	2109				~			-

										DQA:	Dat	:e: _	
NCR:	res / I	No			WORK ORDER NON-C	ONF	ORN	MANCE / UPDATE		04614	0-4		
					T					QA Closed:	Dat	e:	
Work Orde	or.				DISPOSITION	Ì		AGAINST I	DE	PARTMENT/	PROCESS		
Part N	No				Rework Scrap Use-as-is Work Order Update	т	herm	Skid-tube Crosstube Machining Small Fab noforming Finishing Large Fab Composite		l .	Water Jet d. Eng. Coor. e/Packaging Supplier		Engineering Quality Other
NCR N	NO			<del></del>	work Order Opdate	'		composite		l	Supplier		<b>i</b> }
Root				Descri	ption of work order update	Init	ial	Action		Sign &			
Cause	Da	te Step	Qty	(	or Non-conformance	Chief	Eng	Description		Date	Verification	1	QC Inspector
Doc/Data													
Equip/Tooling												- 1	
Operator													
Material													
Setup													
Other													
Process													
Supplier			ł										
Training			1										
Unapproved						<u> </u>							
					F	AULT (	CATE	GORY			·		
Landi	ng Gear				General			•		•	-		
	Bend	ling			Bend	Gr	rain			Ovalized		1	Pressure/Forced
	Cent	re Not Conc	entric to	O/S	BOM/Route	На	ardwa	re		Over/Under	tolerance	_	Temperature/Cure
]	Crac	ks			Broken/Damaged	Ins	specti	on Incomplete		Part Incorred	t [	'	Weld
	Crus	hed/Crimpe	d		Burrs	lns	struct	ions Incomplete/Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
	Cuff	5			Contamination	Шм	lainte	nance		Part Moved			
1	Heat	Treat			Countersink	1 Імі	islabe	led		Positioned W	/rong		

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Other

Power Loss/Surge

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Packaging

October-07-13	9:11:35 AM				1		144					· <del></del> _	- <del> </del>
Item ID: Revision ID: Item Name:	D2935 Saddle Spacer			<u>.</u>	Accept	*	<b>V</b> 900	<b>040</b>	100	<b>)*</b>	Setup Stai	i	S1*
Start Date: Required Date: Reference:	10/07/13	<b>Start Qty:</b> 20.00 <b>Req'd Qty:</b> 20.00		'20* '20*			Cust Item I Customer:	D:				14	( 12
Approvals:		n:	Date:		Tooling: SPC (Y/N)	):		ate:		I	Run Sta Sto	1/1	R1* R2*
Sequence ID/ Work Center II 130 *120* HandFinish Hand Finishing	D	Operation Description Chemical Conversion Coa	at per QSI005	4.1	Set Up/ Run Ho 0.00		Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	•
*140 *140* QC Quality Control		QC3-Inspect Part Finish  Memo			0.00 0.00	DAS 27 2 <sup>889</sup> 3[12] 1[				<u> 20</u>			
150 *150* Packaging		Identify as per dwg & Sto		[U2/	0.00				1.	3/14/1	6 6	۔ مرکب	DAS 32 9-89

										DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-C	CON	FORN	AANCE / UP	DATE	OA Clasad	Data	
										QA Closed:	Date:	
Work Orde	er:				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part N					Rework Scrap Use-as-is		ř	Skid-tube Machining noforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	lo			<u></u>	Work Order Update	<sup>†</sup>		Large Fab	Composite	Nec/Stol	Supplier	Other
Root				Descri	ption of work order update	In	itial	Act	tion	Sign &		
Cause	Date	Step	Qty	(	or Non-conformance	Chie	ef Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup												
Other												
Process												
Supplier						}						
Training												
Unapproved						<u> </u>						
					F	AULT	CATE	GORY				
Landi	ng Gear			٠,	General				<del></del>	7	_	7
	Bending			_	Bend	<b></b>	Grain			Ovalized		Pressure/Forced
	Centre No	ot Conce	ntric to	o/s	BOM/Route	$\vdash$	Hardwa			Over/Under	<del></del>	Temperature/Cure
	Cracks			<u> </u>	Broken/Damaged	-		on Incomplete		Part Incorre	<del></del>	Weld
	Crushed/	Crimped		_	Burrs	-		ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs				Contamination	$\vdash$		nance		Part Moved		
	Heat Trea			<u> </u>	Countersink	$\vdash$	Mislabe			Positioned V	_	7
	Inspectio		Tube		Cut Too Short	$\vdash$	Misread	I		Power Loss/	Surge	Other
	Ripples ir	n Bend		<u></u>	Drill Holes	Щ	Offset					
	Torque V	Vaves in E	Extrusio	n	Drawing		Out of 0	Calibration				

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Finish

Folio

<b>Work Order ID 108104</b> October-07-13 9:11:35 AM			*108104*							Page 3				
Revision ID:	D2935 Saddle Spacer			Accept	*N900	040	100	)*	Setup	Start Stop	*N:	S1* S2*		
Start Date: Required Date:	10/07/13 10/07/13	<b>Start Qty:</b> 20.00 <b>Req'd Qty:</b> 20.00	*20* *20*		Cust Item I Customer:	D:								
Reference:					<del></del>				Run	Start	<b>481</b>	714		
Approvals:	Process Pla	n:	Date:	Tooling:	D:	ate:					^NI	₹1*		
	QC:		Date:	SPC (Y/N):	Da	ate:				Stop	*NI	₹2*		
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Re Qt	•	Reject Number	Insp. Stamp	··· /	
160		QC21- Final Inspection -	Work Order Release	0.00					ì	٦١.	-10	/ DIX		
*160*		Мето		0.00						7/1	2/10		0	
Quality Control										·	1	w 3121	18	

									DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-C	ONFO	RMANCE /	UPDATE			
									QA Closed:	Date:	
Work Orde	ır.				DISPOSITION			AGAINST D	EPARTMENT	/PROCESS	
Part N		<del></del>			Rework Scrap		Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet	Engineering Quality
NCR N	lo				Use-as-is Work Order Update	The	rmoforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root				Descri	ption of work order update	Initia		Action	Sign &		
Cause	Date	Step	Qty	(	or Non-conformance	Chief E	ng D	escription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup							1				
Other											
Process											
Supplier						ļ					
Training											
Unapproved						ļ					
					<u> </u>	AULT CA	TEGORY				
Landi	ng Gear				General	_		_		·	-
	Bending				Bend -	Grai	n		Ovalized		Pressure/Forced
	Centre I	Not Conce	ntric to	o/s	BOM/Route	Hard	ware		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Insp	ection Incomplet	e	Part Incorre	ct	Weld
	Crushed	/Crimped			Burrs	Instr	uctions Incomple	ete/Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination	Mai	ntenance		Part Moved		
	Heat Tro	eat			Countersink	Misl	abeled		Positioned \	Wrong	_
	Inspecti	on Strip in	1 Tube		Cut Too Short	Misr	ead	[	Power Loss/	/Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

## **Picklist Print**

October-07-13 9:11:35 AM

Work Order ID:

108104

Parent Item:

D2935

Parent Item Name:

Saddle Spacer

IPP A00.06.06New IssueEC

IPP Rev:B Now 6061-T6 06-06-23 JLM

Page 1

**Start Date:** 10/07/13

Required Date: 10/07/13

**Start Qty: 20.00** 

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.080 6061-T6 .080 Sheet		Purchased	No			100	sf	556.8680	0.0507	1.067368			Jm13-12-4
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT021		556.868							
				1258	312	32.75							
				m12	6309	363.5			1277				
				m12	6350	160.618			66	350			

Comments:

DQA: Date: **WORK ORDER NON-CONFORMANCE / UPDATE** NCR: Yes / No QA Closed: Date: **AGAINST DEPARTMENT/PROCESS** DISPOSITION Work Order: Rework Skid-tube Crosstube Water Jet Engineering Quality Part No. Scrap Machining Small Fab Prod. Eng. Coor. Thermoforming Finishing Rec/Store/Packaging Other Use-as-is Composite Supplier NCR No. Work Order Update Large Fab Description of work order update Action Initial Sign & Root or Non-conformance Chief Eng Description Date Verification QC Inspector Cause Date Step Qty Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier

Landing	Gear _	General	_	_	_
	Bending	Bend	Grain	Ovalized	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure
	Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	]Weld
	Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled
	Cuffs	Contamination	Maintenance	Part Moved	-
	Heat Treat	Countersink	Mislabeled	Positioned Wrong	 _
	Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge	Other
	Ripples in Bend	Drill Holes	Offset		
	Torque Waves in Extrusion	Drawing	Out of Calibration		
	Turning Sequence	Finish	Out of Sequence		
	Wave/Twist in Tube	Folio	Outside Dimensions		

Outside Dimensions

**FAULT CATEGORY** 

Wave/Twist in Tube

Training Unapproved

DART AEROSPACE LTD	Work Order:	108104
Description: Saddle Spacer	Part Number:	D2935
Inspection Dwg: D2935 Rev: B		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article

Prototype

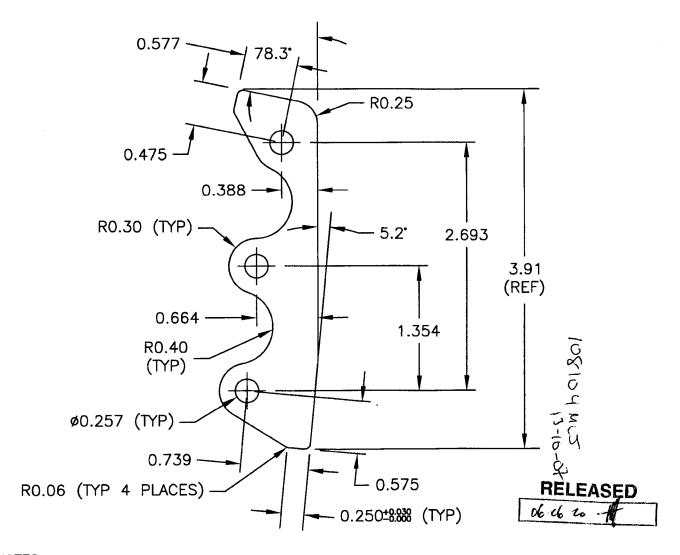
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.257	+0.006/-0.001	0.259,"	•		V	Amoi
3.91	+/-0.030	3.91	_		V	
1.354	+/-0.010	1.354"			V	
2.693	+/-0.010	1.354"	_		V	
0.250	+/-0.010	6,258			V	
R0.25	+/-0.030	0.25"	_		RG	

			-046		
Measured by:	Im	Audited by:	127	Prototype Approval:	N/A
Date:	13-12-9	Date:	B 192109	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	06.06.05	New Issue	KJ/JLM ,	1
В	06.06.23	Dwg Rev. changed	KJ/JLM J	
			, ()	/-/



DESIG	· #	DRAWN BY	DART AEROSPACE PORT HADLOCK, WA	
CHECK		APPROVED A	DRAWING NO.	REV. B
	PH		D2935	SHEET 1 OF 1
DATE			TITLE	SCALE
06.05.29			SADDLE SPACER	1:1
Α		99.11.02	NEW ISSUE	
В		06.05.29	ADD 6061-T6 MATERIAL	



## NOTES:

1) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR AMS 4025 OR AMS 4027) 0.080" THICK

(REF DART SPEC M6061T6S.080)

OR

5052-H32/H34 (PER QQ-A-250/8 OR AMS 4016) 0.080" THICK (REF DART SPEC M5052H32S.080)

- 2) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 5) ALL DIMENSIONS ARE IN INCHES

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